

# Notice of Allowability

Application No.

09/520,678

Examiner

Herng-der Day

Applicant(s)

TIPPING ET AL.

Art Unit

2128

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment received 6/29/04 and 8/6/04.
2. ☒ The allowed claim(s) is/are 1,2,4,5,7-11,13,14 and 17-19.
3. ☒ The drawings filed on 06 August 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Thaiphon  
Thai Phan  
Patent Examiner  
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### **DETAILED ACTION**

**1.** This communication is in response to Applicants' Amendment to Office Action dated June 17, 2004, faxed June 29, 2004, and Applicants' Supplemental Amendment faxed August 6, 2004.

**1-1.** Claims 7-9 and 17-19 have been amended; claims 6 and 16 have been cancelled; claims 1-2, 4-5, 7-11, 13-14, and 17-19 are pending.

**1-2.** Claims 1-2, 4-5, 7-11, 13-14, and 17-19 have been examined and allowed.

### ***Reasons for Allowance***

**2.** The following is an Examiner's statement of reasons for allowance:

**2-1.** The closest prior art of record discloses:

(1) A hierarchical Bayes approach (Matsumoto et al., "Reconstruction and Prediction of Nonlinear Dynamical System: A Hierarchical Bayes Approach with Neural Nets");

(2) A variational inference engine for probabilistic graphical model (Bishop et al., U.S. Patent 6,556,960 B1); and

(3) A relevance vector machine for data modeling (Tipping, U.S. Patent 6,633,857 B1).

**2-2.** Claims 1-2, 4-5, 7-11, 13-14, and 17-19 are deemed novel and non-obvious over the prior art of record and are allowed. The claims are allowed in view of the claim amendments received by PTO March 1, 2004, and June 29, 2004, respectively, as well as Applicants' arguments made at pages 10-18 in the Amendment received by PTO March 1, 2004.

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3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Heng-der Day whose telephone number is (703) 305-5269. The Examiner can normally be reached on 9:00 - 17:30.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Jean Homere can be reached on (703) 308-6647. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Heng-der Day  
August 6, 2004

Thaiphon  
Thai Phan  
Patent Examiner  
AU: 2128

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